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NOTICE OF ALLOWANCE AND ISSUE FEE DUE

HM22/0224

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APPLICATION NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
07/938,154	11/30/92	041	ULM, J	1646 02/24/99
First Named Applicant	HARPOLD, 35 USC 154(b) term ext. = 0 Days.			

TITLE OF INVENTION: HUMAN NEURONAL NICOTINIC ACETYLCHOLINE RECEPTOR COMPOSITIONS AND METHODS EMPLOYING SAME

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
1 63629389	435-007.100	P47	UTILITY	NO	\$1210.00	05/24/99

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.

THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.

HOW TO RESPOND TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the Patent and Trademark Office of the change in status, or
- B. If the status is the same, pay the FEE DUE shown above.

If the SMALL ENTITY is shown as NO:

- A. Pay FEE DUE shown above, or
- B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.

II. Part B-Issue Fee Transmittal should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B Issue Fee Transmittal should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "4b" of Part B-Issue Fee Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give application number and batch number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

 Address: COMMISSIONER OF PATENTS AND TRADEMARKS
 Washington, D.C. 20231

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
07/938,154	11/30/92	HARPOLD	M 63629380

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HM22/0224

EXAMINER

ULM, J

ART UNIT PAPER NUMBER

1646

DATE MAILED: 02/24/99

 This is a communication from the examiner in charge of your application.
 COMMISSIONER OF PATENTS AND TRADEMARKS
NOTICE OF ALLOWABILITY

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course.

☒ This communication is responsive to Telephone conversation of 2-16-98
☒ The allowed claim(s) is/are 53, 54, 55, 58, 60, 62, 66, 68, 75, 77, 79, 85, 91, 98, 101-114
☐ The drawings filed on _____ are acceptable.

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

☐ *Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE THREE MONTHS FROM THE "DATE MAILED" of this Office action. Failure to timely comply will result in ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.

☒ Applicant MUST submit NEW FORMAL DRAWINGS

☐ because the originally filed drawings were declared by applicant to be informal.

☒ including changes required by the Notice of Draftperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No. 12
☐ including changes required by the proposed drawing correction filed on _____, which has been approved by the examiner.

☐ including changes required by the attached Examiner's Amendment/Comment.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the reverse side of the drawings. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftperson.

☐ Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Any response to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE/SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.

Attachment(s)
☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Notice of Draftperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

☐ Interview Summary, PTO-413

☒ Examiner's Amendment/Comment

☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

☐ Examiner's Statement of Reasons for Allowance

 JOHN ULM
 PRIMARY EXAMINER
 GROUP 1800

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Application/Control Number: 07/938,154

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Art Unit: 1646

1) Claims 53, 55, 56, 59, 60, 62, 66, 68, 70, 72, 79 to 85, 91 to 98 and 101 to 114 are pending in the instant application. As all of the pending claims are allowable claims 53, 55, 56, 72, 76, 79, 80, 59, 63, 66, 68, 70, 95, 91 to 94, 107, 108, 113, 81, 60, 62, 109 to 112, 114, 82 to 85, 96 to 98 and 100 to 106 have been renumbered 1 to 41, respectively.

2) An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

IN THE CLAIMS:

In the fifth line of claim 68 change "the cells by monitoring" to --the cell by monitoring--.

In the first line of claim 70 change "the the cell" to --the cell--.

In the fifth and sixth line of claim 72 change "acetylcholine receptor, eukaryotic cells" to --acetylcholine receptor into eukaryotic cells--.

28 ~~82~~ (Twice amended) An isolated and purified protein encoded by the alpha2-encoding nucleic acid [of claim 79] open reading frame that is isolated from a plasmid having all of the identifying characteristics of HnAChR α 2 deposited under ATCC Accession Number 68277.

29 ~~83~~ (Twice amended) An isolated and purified subunit of a human nicotinic acetylcholine receptor encoded by the alpha3-encoding nucleic acid [of claim 80] open reading

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frame that is isolated from a plasmid having all of the identifying characteristics of HnAChR α 3 deposited under ATCC Accession Number 68278.

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~~30~~ 84. (Twice amended) An isolated and purified subunit of a human nicotinic acetylcholine receptor encoded by the beta2-encoding nucleic acid [of claim 81] open reading frame that is isolated from a plasmid having all of the identifying characteristics of HnAChR β 2 deposited under ATCC Accession Number 68279 or the sequence of nucleotides set forth as nucleotides 1-1521 of SEQ ID NO:9.

In claims 107 and 110 delete "bacterial or".

Add claims 113 and 114 as follows:

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~~19~~ 113. The cell of claim ~~2~~ that is a bacterial cell.

~~27~~ 114. The cell of claim ~~109~~ that is a bacterial cell.

IN THE SPECIFICATION:

In line 2 on page 12 of the specification, change "Rockville, Maryland" to --10801 University Boulevard, Manassas, VA 20110-2209--.

Authorization for this examiner's amendment to the claims was given in a telephone interview with Stephanie L. Seidman on 16 February of 1999.

3) Figure 9 of the instant application is presented on three separate panels. 37 C.F.R. § 1.84(U)(1) states that when partial views of a drawing which are intended to form one complete view, whether contained on one or several sheets, must be identified by the same number followed by a capital letter. The three sheets of drawings which constitute Figure 9 in the instant

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Art Unit: 1646

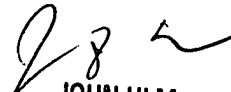
specification should be numbered "Figures 9A, 9B and 9C". Applicant is reminded that once the drawings are changed to meet the separate numbering requirement of 37 C.F.R. § 1.84(U)(1), Applicant is required to file an amendment under 37 C.F.R. § 1.312 to change the Brief Description of the Drawings and the rest of the specification accordingly.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John D. Ulm whose telephone number is (703) 308-4008. The examiner can normally be reached on Monday through Friday from 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lila Feisee can be reached at (703) 308-2731.

Official papers filed by fax should be directed to (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.


JOHN ULM
PRIMARY EXAMINER
GROUP 1800

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